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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/701,832

11/05/2003

Elmer G. Fridrich

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08/30/2006

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EXAMINER

RIELLEY, ELIZABETH A

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

### Office Action Summary

Application No.

10/701.832

**Applicant(s)**

FRIDRICH, ELMER G.

Examiner

**Elizabeth A. Rielley**

**Art Unit**

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 15-29 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

Amendment filed 6/22/06 has been entered and considered by the Examiner. Claims 24-29 have been added. Currently, claims 15-29 are pending in the instant application.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15, 16, 20-23, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Brundige (US 3189778).

In regard to claim 15, Brundige ('778) teaches a filament assembly (figures 4 and 5) for incandescent light sources (10; column 2 lines 28-49), the filament assembly comprising: a filament having a first spud coil at a first end and a second spud coil at a second end (18; the filament is a coil, therefore the ends are spud coils); a first lead wire (16) having an inner cut end (23) that is screwed into the first spud coil (see figures 4 and 5) and a second lead wire (16; opposite side) having an inner cut end that is screwed into the second spud coil (see figures 4 and 5); and at least one spur near the end of the first lead wire's inner cut end (flat 22 protrudes laterally out from the lead wire 16), and at least one spur near the end of the second lead wire's inner cut end (same as above), wherein each of the spurs protrudes

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laterally beyond a perimeter of the respective first and second lead wires and engages with turns of the respective first and second spud coils (see figures 4 and 5; column 2 line 54 to column 3 line 54).

In regard to Applicant's recitation of the inner cut end is screwed into the coil, the Examiner notes that the recitation is considered a product by process limitation. It has been recognized that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process," *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See also MPEP 2113. Therefore, Accordingly, Brundige's ('778) teachings of the inner cut end inside the coil is considered to meet the claimed recitation.

In regard to claim 16, Brundige ('778) teaches the filament comprises a wire; and the first and second spud coils are helical coils of the wire (column 2 lines 28-49; see figures 4 and 5).

In regard to claim 20, Brundige ('778) teaches the first lead wire's inner cut end comprises a single spur near the end of the first lead wire's inner cut end (see figure 3; column 2 line 54 to column 3 line 54), and a longitudinally directed point at the end of the first lead wire's inner cut end (see figures 3 and 4); and the second lead wire's inner cut end comprises a single spur near the end of the second lead wire's inner cut end (see above), and a longitudinally directed point at the end of the second lead wire's inner cut end (see figures 3 and 4).

In regard to claims 21 and 23, Brundige ('778) teaches the first lead wire is a first foliated lead comprising a sealing foil (14; column 2 lines 28-49 bookend-ed by an inner lead wire (16) outwardly

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ending in the first lead wire's inner cut end (see figure 3), and an outer lead wire (not numbered; see figure 1); and the second lead wire is a second foliated lead comprising a sealing foil bookend-ed by an inner lead wire outwardly ending in the second lead wire's inner cut end, and an outer lead wire (see above, figure 1).

In regard to claim 22, Brundige ('778) teaches an outer cut end of the first lead wire (see figures 3 and 4, the inner cut shoulder 26 create an outer cut head portion) and an outer cut end of the second lead wire wherein: each of the first lead wire's and second lead wire's outer cut ends has at least one spur near the end of the outer cut end (see figure 1).

In regard to claim 29, Brundige ('778) two sides of the cut end form a vertex having an angle in the range of about 60 to 120 degrees (24; see figure 3).

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brundige (US 3189778) in view of Claessens et al (US 4959586).

In regard to claim 17, Brundige ('778) teaches all the limitations set forth; as describes above, but is silent regarding the limitations of an incandescent portion of the filament; a first stretched-out portion

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of the filament between the first spud coil and the incandescent portion; and a second stretched-out portion of the filament between the second spud coil and the incandescent portion, wherein: the first and second stretched-out portions comprise substantially uncoiled wire. In the same field of endeavor, Claessens et al ('586) teaches a filament assembly comprising an incandescent portion of the filament (5, 6, 7; column 3 lines 31-40); a first stretched-out portion of the filament between the first spud coil and the incandescent portion (8); and a second stretched-out portion of the filament between the second spud coil and the incandescent portion (9), wherein: the first and second stretched-out portions comprise substantially uncoiled wire (see figure 1a) in order to decrease electrical resistance in the lamp (column 3 lines 2-5). Hence, it would have been obvious at the time of the invention to one of ordinary skill in the art to incorporate the filament design of Claessens with the filament assembly of Brundige. Motivation to combine would be to decrease electrical resistance in the lamp.

In regard to claim 18, Claessens et al ('586) continues to teach the incandescent portion comprises a helical coil with a pitch approximately equal to the pitches of the first and second spud coils (see figure 1a; column 3 line 40 to column 4 line 3) decrease electrical resistance in the lamp (column 3 lines 2-5). Hence, it would have been obvious at the time of the invention to one of ordinary skill in the art to incorporate the filament design of Claessens with the filament assembly of Brundige. Motivation to combine would be to decrease electrical resistance in the lamp.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brundige (US 3189778) in view of Claessens et al (US 4959586) and in further view of Kamegaya et al (US 3670195).

In regard to claim 19, Brundige/Claessens teach all the limitations set forth, as describes above, but are silent regarding the limitation of a doubled coil for the incandescent portion. In the same field of endeavor, Kamegaya et al ('195) teaches the use of a double or single coiled filament in a discharge lamp

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(column 1 lines 9-25). Accordingly, Kamegaya exemplifies the art recognized equivalence of single coils and double coils in discharge lamps, thus, one skilled in the art at the time of the invention would reasonable contemplate modifying the filament assembly of Brundige/Claessens to incorporate the double coil of Kamegaya since the selection of either art recognized equivalent assemblies would be considered within the level of skill in the art.

Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brundige (US 3189778) in view of Claessens et al (US 4959586) and in further view of Hodge (US 2830217).

In regard to claims 24, 27, and 28, Brundige/Claessens teach all limitations set forth, as describes above, but are silent regarding the limitation of the spur formed in an acute angle. In the same fired of endeavor, Hodge ('217) teaches a filament assembly wherein the spur is formed of an acute angle (7; figure 2; column 1 line 53 to column 2 line 28) in the range of about 45 to 75 degrees (see figure 2) so that the spur may more easily enter into the end of the filament coil (column 2 lines 15-18). Hence, it would have been obvious at the time of the invention to one of ordinary skill in the art to incorporate the filament design of Hodge with the filament assembly of Brundige/Claessens. Motivation to combine would be so that the spur may more easily enter into the end of the filament coil. Applicant's recitation of cutting the lead wire, the Examiner notes that the recitation is considered a product by process limitation. It has been recognized that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on it's method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process," *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See also MPEP 2113. Therefore, Accordingly, Hodge's teachings of a spur made of an acute angle is considered to meet the claimed recitation.

In regard to claims 25 and 26, Applicant's recitation of the cutting blade having an angle in the range of 60-120 degrees and being blunt, the Examiner notes that the recitation is considered a product by process limitation. It has been recognized that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process," *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See also MPEP 2113. Therefore, Accordingly, Hodge's teaching of a spur made of an acute angle within 45-75 degrees (see figures 2 and 3) is considered to meet the claimed recitation.

### ***Response to Arguments***

Applicant's arguments with respect to claims 15-23 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following US Patents have similar filament assemblies: 4812710, 5140217, 5675218, 5777435, 5793159, 6057532, 6291934, 6429579, 6465949, 6465939.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Rielley whose telephone number is 571-272-2117. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Elizabeth Rielley

Examiner  
Art Unit 2879



MARICELI SANTIAGO  
PRIMARY EXAMINER